



# Tool use

These resource cards aim to support the consistent teaching of safe tool handling and use for gardening and wood working activities.

#### **General best practice tool use guidelines**

- A risk benefit analysis should be developed, and controls communicated to all present.
- Personal and Protective Equipment (PPE) is required when using tools.
- We recommend using an appropriately sized safety glove on the non-tool using hand, stout boots, or steel toe cap boots (if using swinging tools), and a hard hat if necessary.

If working in densely vegetated areas, you may require high visibility clothing.

- Tool use must be adequately supervised. Ratio of learner to adults and related risks must be assessed by the group leader, with consideration given to the ability/maturity of learners present, activities to be undertaken, and tools required.
- Tools should be kept within a designated tool area. The tool area should be checked before use for any hazards that might cause issues.
- Tools should be well maintained and checked for safety before each use. Blades should be sharp.
- Tools should be kept in a tool bag or similar and brought into the tool area by the group leader for supervised activities. Depending on the group's ability/maturity, trowels and other gardening tools are not included in this rule and can be made available for use at all times.
- Tools should be counted in and out before and after use.
- When a learner has finished with a tool, it should be returned to the tool bag. Never leave tools lying around.
- Learners must be told to never run with tools. Learners must be made aware of safe carrying and passing of tools, i.e. carried down by your side when not in use.
- Tools should be used within a 'safety bubble'. A safety bubble is determined by the learner outstretching both arms and moving them in all directions while staying in the same spot this is their safety bubble. No other learner should be able to reach within that space while they are using a tool. If two learners are sitting next to each other, neither should be able to touch the other with outstretched hands if they are using the safety bubble rule correctly.
- Before using the tools, the group leader should use the **Resource cards Tool use** to familiarise the learners with safe use of the tools via the anacronym **NACHPPUFM** to cover: **Name** of the tool; **A Annotate** the parts of individual tools drawing attention particularly to the more risky areas; how to **C Check** the tool is safe before use; how to **H Handle** the tool especially when handing to another; what **P** Personal Protective Equipment **PPE** might be required when using the tool; what their **P Purpose** and use is; how to **U Use** them; what to do with them once they have **F Finished** using them; what to do to **M Maintain** the tool over time to ensure sustainable use.



#### Loppers

**N** Name

Loppers.

**Annotate** Handles (grips), hinge, pivot nut, cutting edge (bypass or anvil).

# **Check** Grips are not damaged or loose. Cutting edge is clean and opens and closes. Hinge works freely. If present, extendable handle operation is smooth and secure when in use.

**H** Handling Carry down at your side with your hand on the lower part of the handle. Ensure cutting edge is closed. When passing to another person, pass the handle first.

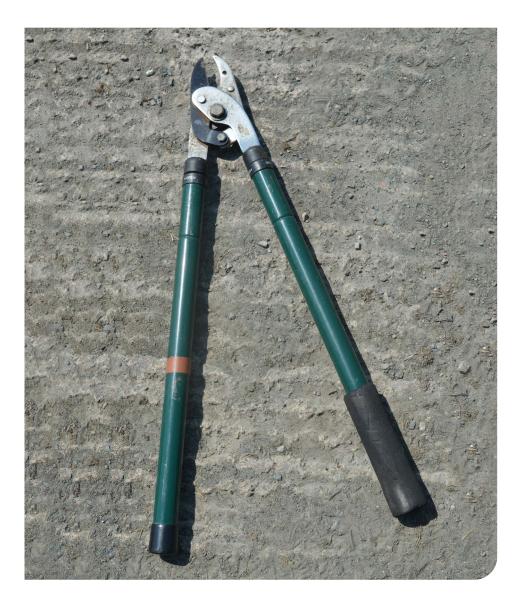
**PPE** Gloves. Long trousers (preferably over trousers / overalls). Working boots. Hard hat. High visibility clothing.

**P** Purpose Used for cutting sticks and branches up to 4cm diameter (approx.).

Use Make sure you have a clear area to work in, with no one in close proximity. If cutting overhead, wear a hard hat. Use the length of the handles to give maximum leverage. Hold tool on handles. Make sure no hands are near the branches you are cutting. Anvil loppers - a single blade closing onto a flat base, used for dry wood. Bypass loppers two blades that slide past each other like scissors, used for green wood.

**Finishing** Clean cutting edge after use. Close cutting edge. Store in tool bag.

Maintain Periodically wash and clean off sap from blade. Keep blade sharp by honing with wet or dry sharpening stone. Wipe with an oiled cloth.



# Billhook

| Name               | Billhook.   |
|--------------------|---|
| Annotate           | Handle, cutting edge.   |
| C Check            | Make sure that handle and cutting edge are secure. Blade should be sharp.   |
| Handling           | Carry at your side with cutting edge facing back.<br>When passing to another person, pass the handle<br>first.                                |
| P PPE              | Glove on non-working hand. Long trousers<br>(preferably over trousers/overalls). Steel<br>toe cap boots. High visibility clothing.            |
| P Purpose          | Used for splitting logs and green wood, snedding<br>(stripping) branches, hedge laying, coppicing,<br>clearance.                              |
| U Use              | Make sure you have a clear area to work in with no<br>one is in close proximity. Always move blade away<br>from the body.                     |
|                    | For splitting logs - secure log on a flat surface.<br>Position tool on top of small log and strike with<br>a wooden mallet.                   |
|                    | For snedding – stand in a secure position, hold<br>branch in a secure position, i.e., under arm and<br>move tool along branch.                |
| <b>F</b> Finishing | Clean cutting edge after use. Cover blade and store in tool bag.  |
| Maintain Maintain  | Periodically wash and clean off sap from blade.<br>Keep blade sharp by honing, with wet or dry<br>sharpening stone. Wipe with an oiled cloth. |



#### Bowsaw

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| Bowsaw.   |   |
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| Handle, blade, blade guard.   |   |
| Blade is secure and sharp. Replace blunt blade before use.  |   |
| Carry at your side with blade facing down. Ensure<br>blade guard is in place. When passing to another<br>person, pass the handle first.   |   |
| Glove on non-working hand. Close fitting glove on<br>working hand if required. Long trousers (preferably<br>over trousers/overalls). Working boots.   |   |
| Used for coppicing, felling small trees, and cutting green and dead wood, branches, and logs.   |   |
| Secure wood on to a flat surface, via a clamp,<br>brace, or gloved hand, or use a sawhorse to hold<br>the wood. Place blade on wood and put free<br>hand through saw and rest on wood. Pull blade<br>backwards three times until a groove is established.<br>Then use saw on both push and pull actions. This<br>can be push, pull style between two users. When<br>coppicing, place the blade at the bottom of the<br>tree branch and keeping the branch secure, pull the<br>blade back and forth until a groove is established. |   |
| Clean blade. Replace blade guard. Store in a tool<br>bag.   |   |
| When blade gets blunt, replace with a new one.<br>Replace damaged or lost blade guards. Wipe with<br>an oiled cloth.  |   |
|   | <ul> <li>Handle, blade, blade guard.</li> <li>Blade is secure and sharp. Replace blunt blade before use.</li> <li>Carry at your side with blade facing down. Ensure blade guard is in place. When passing to another person, pass the handle first.</li> <li>Glove on non-working hand. Close fitting glove on working hand if required. Long trousers (preferably over trousers/overalls). Working boots.</li> <li>Used for coppicing, felling small trees, and cutting green and dead wood, branches, and logs.</li> <li>Secure wood on to a flat surface, via a clamp, brace, or gloved hand, or use a sawhorse to hold the wood. Place blade on wood and put free hand through saw and rest on wood. Pull blade backwards three times until a groove is established.</li> <li>Then use saw on both push and pull actions. This can be push, pull style between two users. When coppicing, place the blade at the bottom of the tree branch and keeping the branch secure, pull the blade back and forth until a groove is established.</li> <li>Clean blade. Replace blade guard. Store in a tool bag.</li> <li>When blade gets blunt, replace with a new one. Replace damaged or lost blade guards. Wipe with</li> </ul> |



#### Penknife, sheath knife, locking knife/non-locking knife

| <b>N</b> Name      | Penknife, sheath knife, locking knife/non-locking<br>knife.   |
|--------------------|---|
| Annotate           | Handle, blade, sheath, hinge, and lock (if locking,<br>folding or penknife).  |
| C Check            | Hinge works freely. Locking device functions.<br>Blade is sharp and secure to handle.   |
| H Handling         | Close, lock, or sheath blade when not in use.<br>When passing to another person, pass the handle<br>first.  |
| P PPE              | Glove on non-working hand. Long trousers,<br>(preferably over trousers/overalls). Working boots.  |
| P Purpose          | Used for cutting, debarking, shaping, carving, splitting smaller logs and for crafts.   |
| Use Use            | Sit or stand in a safe and secure position. Check<br>you have enough personal space to work safely.<br>Lock elbows into body. Place stick under arm at<br>side of body. Work with the blade moving away<br>from you when carving. |
| <b>F</b> Finishing | Clean blade. Secure blade. Store in a tool bag.   |
| Maintain           | Periodically wash and clean off sap from blade.<br>Wipe with an oiled cloth. Keep blade sharp<br>by honing with wet or dry sharpening stone.<br>Periodically oil hinge/lock. Replace broken or<br>badly worn sheath.              |



#### **Secateurs**

| N | Name      | Secateurs.  |
|---|-----------|---|
| A | Annotate  | Handles (grips), hinge, pivot nut, cutting<br>edge (bypass or anvil type), spring, securing<br>mechanism/lock.  |
| 0 | Check     | Grips are secure. Hinge is secure. Cutting edge<br>is sharp. Hinge free to open and close. Securing<br>mechanism works freely.  |
| Ð | Handling  | Make sure cutting edge is closed when carrying.<br>Carry at your side by the handles. When passing<br>to another person, pass the handle first.   |
| P | PPE       | Gloves on non-working hand. Long trousers (preferably over trousers/overalls). Working boots.   |
| P | Purpose   | For cutting small branches up to 2cm diameter (approx.).  |
| U | Use       | Check you have enough personal space to work<br>safely. Place wood as near as possible to the hinge<br>to give maximum leverage. Cut small branches with<br>one hand on handles, the other hand holding the<br>branch you are cutting. Do not use to cut branches<br>nearly out of reach or too high. Anvil secateurs -<br>a single blade closing onto a flat base, used for<br>dry wood. Bypass secateurs - two blades that slide<br>past each other like scissors, used for green wood. |
| F | Finishing | Clean cutting edge. Close cutting edge and lock tool. Store in a tool bag.  |
| M | Maintain  | Periodically wash and clean off sap from blade.<br>Keep blade sharp by honing with wet or dry<br>sharpening stone. Wipe with an oiled cloth.  |



# **Potato peeler**

| N | Name      | Potato peeler.   |
|---|-----------|--|
| A | Annotate  | Handle, cutting edge.  |
| С | Check     | Handle and cutting edge secure.  |
| 0 | Handling  | Carry at side, pointed downwards. When passing to another person, pass the handle first.   |
| P | PPE       | Glove on non-working hand. Working boots.  |
| P | Purpose   | Used for cleaning and stripping bark, pointing campfire cooking sticks.  |
| U | Use       | Sit or stand in a safe and secure position. Check<br>you have enough personal space to work safely.<br>Lock elbows into body. Place stick under arm at<br>side of body. Work with the blade moving away<br>from you. |
| Ð | Finishing | Clean cutting edge. Store in a tool bag or box.  |
| M | Maintain  | Periodically wash and clean off sap from blade.<br>Wipe with an oiled cloth. Replace when blunt.   |



# Junior hacksaw

| Name              | Junior hacksaw.   |
|-------------------|---|
| Annotate          | Handle, blade.  |
| C Check           | Handle is secure. Blade is secure and sharp.<br>Replace blunt blades before use.  |
| Handling          | Carry wrapped or in a small tool bag. When passing to another person, pass the handle first.  |
| P PPE             | Glove on non-working hand. Close fitting glove on<br>working hand if required. Long trousers (preferably<br>over trousers/overalls). Working boots.   |
| P Purpose         | Used for cutting smaller sticks and more precise cutting with a neater finish.  |
| U Use             | Secure wood on to a flat surface, via a clamp,<br>brace, or gloved hand. Place blade on wood and<br>use free hand to hold wood in place. Pull blade<br>back and forth slowly until groove is established. |
| <b>F</b> inishing | Clean cutting edge and store in a small tool bag.   |
| Maintain Maintain | Regularly check that the blade and handle are secure. Wipe with an oiled cloth.   |



# Trowel

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| Name Name         | Trowel.  |
| Annotate          | Handle, blade.   |
| C Check           | Handle is secure. Blade is secure.   |
| Handling          | Carry wrapped or in a small tool bag. When passing to another person, pass the handle first.   |
| P PPE             | Gardening gloves. Work boots.  |
| P Purpose         | Used for digging small holes, clearing weeds, and scraping away thin layers of soil.   |
| U Use             | Place the tip of the blade into the soil. Apply pressure on the handle. Lever the handle and scoop the soil up.  |
| <b>F</b> inishing | Clean the blade. Store in a tool bag.  |
| Maintain Maintain | Regularly check that the blade and handle are<br>secure. Thoroughly clean blade and handle,<br>removing any rust with a wire brush, fine steel<br>wool and medium grit sandpaper. File away<br>from the body, use a three-sided file to bevel<br>the edge of the blade for a sharp edge. Apply<br>a thin coat of oil to all parts of the trowel. |



# Spade

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| Name      | Spade.  |
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| Annotate  | Handle, step, blade, shaft.   |
| Check     | Handle is secure. Blade is secure.  |
| Handling  | Carry by the shaft of the handle wrapped or in a<br>small tool bag. When passing to another person,<br>pass the handle first.   |
| PPE       | Gardening gloves. Long trousers (preferably over trousers/overalls). Steel toe cap boots.   |
| Purpose   | Used for digging, making straight-edged holes and trenches, slicing, lifting sod, and edging. Also used for weeding and planting.   |
| Use       | Place the edge of the blade into the soil, usually at<br>an angle. Apply pressure on the handle and lever<br>the handle, scooping the soil up. For hard soils,<br>place foot on the step – the top edge of the blade<br>– and press down firmly, along with the pressure<br>to the handle.  |
| Finishing | Clean the blade. Store in an upright position to prevent trips and other injuries.  |
| Maintain  | Regularly check that the blade and handle are<br>secure. Thoroughly clean blade and handle,<br>removing any rust with a wire brush, fine steel<br>wool and medium grit sandpaper. File away<br>from the body, use a three-sided file to bevel<br>the edge of the blade for a sharp edge. Apply<br>a thin coat of oil to all parts of the spade. |



## **Pruning saw**

| Name               | Pruning saw.  |
|--------------------|---|
| Annotate           | Handle, blade, hinge, lock.   |
| C Check            | Handle is secure. Blade is secure and sharp. Folding pruning saws should have a smooth closing and opening mechanism. Lock works securely.  |
| H Handling         | Carry folded. When passing to another person,<br>pass the handle first or with the saw in the folded<br>position.   |
| P PPE              | Glove on non-working hand. Close fitting glove on working hand if required. Long trousers (preferably over trousers/overalls). Working boots.   |
| P Purpose          | Used to trim or cut green and dead wood, shrubs,<br>and small branches, up to approximately 10cm<br>diameter, depending upon size of blade.   |
| U Use              | Secure wood lengths before sawing. Use stepped<br>cuts (the process of cutting with multiple 'steps'<br>rather than the one-step action seen in full depth or<br>fixed cutting) for standing live wood. Hold the stem<br>or branch firmly with the non-cutting hand. Start the<br>cut by placing the saw teeth of the blade on top of<br>the stem or branch and slowly pull the blade toward<br>you. Establish a groove by making three backward<br>cuts. Most pruning saws work on the pull action.<br>When the blade is firmly seated, draw the blade<br>slowly and in a controlled manner, back and forth. |
| <b>F</b> Finishing | Clean the blade carefully. If a folding pruning saw, fold and secure. Store in a tool bag.  |
| Maintain Maintain  | Regularly check that the blade and handle are<br>secure. Oil handle if folding action becomes less<br>smooth. Wipe with an oiled cloth. Check blade<br>remains sharp and replace when needed.   |



#### Palm drill, gimlet, hand drill, hand brace, auger

| Name              | Palm drill, gimlet, hand drill, hand brace, auger.  |
|-------------------|---|
| <b>A</b> Annotate | Handle, drill bit, chuck (on hand drill).   |
| Check             | Drill bit is secure in the palm drill. Chuck is tightened<br>and holding the drill bit securely in the hand drill<br>and the handle turns freely.   |
| H Handling        | Carry at your side with the point downwards,<br>wrapped or in a small tool bag. When passing<br>to another person, pass the handle first.   |
| P PPE             | Glove on non-tool hand. Long trousers. Work boots.  |
| P Purpose         | Used to make pilot holes and small holes in soft wood, conkers, and similar materials.  |
| Use Use           | Palm drill - secure wood on to a flat surface, via a<br>clamp, brace, or gloved hand. Use the dominant<br>hand to apply pressure downwards, twisting the<br>palm drill in a clockwise direction until the depth<br>of the required hole is reached. Hand drill - secure<br>wood on to a flat surface, via a clamp, brace or<br>gloved hand. Keep the hand drill in a vertical<br>position, with the drill point on the wood. One hand<br>holds the handle at the top whilst the second hand<br>rotates the other handle in a clockwise direction.<br>Apply slight pressure. Untwist to release the drill. |
| <b>F</b> inishing | Use a cloth to remove any sawdust. Store in a tool bag with drill bit covered for safety.   |
| Maintain Maintain | Palm drill - regularly check that the drill bit is<br>secure and sharp. Hand drill - oil handle to maintain<br>it. Check drill bits are sharp. If strong pressure is<br>needed, drill bit will become blunt. Wipe with an   |

oiled cloth.



#### Axe, hatchet

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| Name       | Axe, hatchet.  |
|------------|--|
| Annotate   | Handle, axe head, poll, or butt of axe head, curved cutting edge, axe eye.   |
| Check      | Ensure that the handle is secure in the axe head.<br>Check axe eye for any damage.   |
| Handling   | Carry in purpose made belt, or holding handle<br>with axe head facing downwards, at side with blade<br>sheath in place. When passing to another person,<br>pass the handle first.  |
| PPE        | Gloves. Long trousers (preferably over trousers<br>/overalls). Steel toe cap boots. High visibility<br>clothing.   |
| Purpose    | Used for chopping, splitting, and whittling wood.  |
| Use        | Stand in a safe and secure position. Check you<br>have enough personal space to work safely. Secure<br>wood on to a flat surface, via a clamp, brace or<br>gloved hand. When chopping, position yourself to<br>the side of the blade's arc. When whittling with an<br>axe, ensure that you have a glove on the holding<br>hand and that the hand is behind the face of the<br>wood that is being whittled. When splitting wood,<br>place the axe head onto the round and strike with<br>a wooden mallet. |
| Finishing  | Clean the axe blade after use; ensure that the head<br>is dry before replacing the blade sheath. Store in a<br>tool bag.   |
| ) Maintain | Periodically wash and clean off sap from the axe's<br>cutting edge. Wipe with an oiled cloth. Ensure<br>that the bevel is sharp by honing with wet or dry<br>sharpening stone. Always dry the axe thoroughly<br>before storing.  |



# Fork (hand, digging or garden)

| Name              | Fork (hand, digging or garden).   |       |
|-------------------|---|-------|
| Annotate          | Handle, grip, shaft, ferrule, tang, socket, tongs, or<br>tines.   |       |
| C Check           | Handle and grips are secure. Tines are secure.  | Type  |
| Handling          | Carry by the shaft of the handle. When passing to another person, pass the handle first.  | a the |
| P PPE             | Gardening gloves. Long trousers (preferably over trousers/overalls). Sturdy or steel toe cap boots.   | 1     |
| P Purpose         | Used for digging, aerating soil, and turning sod.<br>Also for weeding and planting.   |       |
| U Use             | Place the tines into the soil, usually at an angle.<br>Apply pressure on the handle and lever the handle,<br>breaking the soil up. For clay or hard soils, place<br>foot on the top edge of the digging or gardening<br>fork and press down firmly, along with the pressure<br>to the handle. |       |
| <b>F</b> inishing | Clean the tines. Store in an upright position to prevent trips and other injuries.  |       |
| Maintain Maintain | Regularly check that the tines and handle are<br>secure. Thoroughly clean tines and handle,<br>removing any rust with a wire brush, fine steel wool<br>and medium grit sandpaper. Apply a thin coat of oil<br>to all parts of the fork.   |       |



# Dibber

| Name Name         | Dibber.  |
|-------------------|--|
| Annotate          | Handle, shaft, plunger.  |
| C Check           | Handle and plunger are secure.   |
| Handling          | Carry by the shaft of the handle. When passing to another person, pass the handle first.                                     |
| P PPE             | Gardening gloves. Long trousers (preferably over trousers/overalls). Sturdy boots.   |
| P Purpose         | Used for making holes for planting seeds and seedlings.  |
| Use Use           | Place the plunger on the soil. Apply pressure<br>on the handle and press straight down to the<br>required depth.             |
| <b>F</b> inishing | Clean the plunger. Store in a small tool bag.  |
| Maintain Maintain | Regularly check that the plunger and handle<br>are secure. Thoroughly clean plunger and handle.<br>Wipe with an oiled cloth. |

